

VIII. SURFACE METEOROLOGICAL CONDITION IN MIZUHO PLATEAU IN 1971 - 1972

Sadao KAWAGUCHI*, Tomomi YAMADA** and Hiroshi SASAKI***

1. Introduction

Surface meteorological observations were made along the following traverse routes in Mizuho Plateau, shown in Fig.A (folded map), by traverse parties of JARE-12 (1971 - 1972) and -13 (1972 - 1973) as daily routine during the travels in 1971 - 1972.

JARE-12: April 22 - 28, 1971: From Syowa Station to H79 (Table 1).

May 30 - July 26, 1971: Around trip from Syowa Station to Mizuho Camp, via routes S, H and Z (Table 2).

September 23 - 27, 1971: From Syowa Station to Mizuho Camp, via routes S, H and Z (Table 3).

JARE-13: January 14 - 23, 1972: A round trip from Syowa Station to Mizuho Camp, via routes S, H and Z (Table 4).

April 17 - May 15, 1972: A round trip from Syowa Station to Mizuho Camp, via routes S, H and Z (Table 5).

August 24 - September 11, 1972: A round trip from Syowa Station to Mizuho Camp, via routes S, H and Z (Table 6).

October 23 - November 7, 1972: A round trip from Syowa Station to Mizuho Camp, via routes S, H and Z (Table 7).

2. Observations

During the travels, surface meteorological observations were made several times a day as daily routine, basically 5 times a day at 0900, 1200, 1500, 1800, 2100 LT (45° E LMT, GMT + 3h). Observations were made on the air temperature, direction and speed of wind, atmospheric pressure, weather condition, amount of cloud, and surface visibility.

2.1. Air temperature

The air temperature was measured with a calibrated sling-type alcohol thermometer at a height of about 1.5m above the snow surface in the shade from solar radiation. The accuracy of measurement was about $\pm 0.2^{\circ}\text{C}$.

* National Institute of Polar Research, Itabashi-ku, Tokyo.

** The Institute of Low Temperature Science, Hokkaido University, Sapporo.

*** Hokkaido Office, Japan Weather Association, Sapporo.

2.2. Speed and direction of wind

JARE-12: A Robinson-type anemometer was installed above the roof of a snow-vehicle (KD-60) by the use of a metal pole at a level of 3.6m above the snow surface; the wind speed was read by an indicator installed inside the vehicle. The accuracy of measurement was about ± 1 m/s.

JARE-13: A Robinson-type anemometer was held at a level of 1.8m above the snow surface, and the wind speed was read directly.

The direction of wind was observed by the use of a magnetic compass, whereby a correction was made for the magnetic declination. The direction of wind was expressed in 16 directions, i.e., N: 0° , NNE: 23° , NE: 45° , E: 90° , S: 180° , W: 270° and so on.

2.3. Atmospheric pressure

The atmospheric pressure was measured by the use of a wide-range aneroid barometer, which was calibrated with the standard Fortin barometer at Syowa Station immediately before leaving. The accuracy of measurement was about ± 2 mb.

3. Notes for the Tables

LT : local standard time at Syowa Station (GMT + 3 hours)

Cloud : amount of cloud (10: overcast)

Weather : present weather

| | |
|----------|---------------------|
| ○ clear | ↔ ice prism |
| ⊙ fine | ⚡ high blowing snow |
| ☉ cloudy | ⚡ low blowing snow |
| ✱ snow | |

Location of the stations on route H: values of latitude and longitude were figured out by a simple interpolation between S30 and S122, both were the astronomic points (Shimizu et al., 1972), their elevations were according to the result of JARE-14's survey (1973 - 1974).

Reference

Shimizu. H., R. Naruse, K. Omoto and A. Yoshimura (1972): Position of stations, surface elevation and thickness of the ice sheet, and snow temperature at 10m depth in the Mizuho Plateau - West Enderby Land Area, East Antarctica, 1969 - 1971. JARE Data Rep., 17 (Glaciology), 38 - 47.

Table 1. Surface meteorological data from Syowa Station to H79 (April 22-28, 1971).

| Date | Time (LT) | Station number | Latitude (°S) | Longitude (°E) | Altitude (m) | Wind speed (m/s) | Wind direction | Pressure (mb) | Temperature (°C) | Cloud | Weather | Visibility (km) |
|---------|--------------|-------------------|------------------|-------------------|-----------------|------------------------|-------------------|------------------|---------------------|-------|---------|--------------------|
| Apr. 22 | 15 | S 17 | 69° 02' | 40° 04' | 583 | 7 | 113° | — | -20.8 | 2 | ⊙ ↗ | > 7.0 |
| | 21 | 18 | 69 02 | 40 07 | 609 | 6 | 90 | — | -24.0 | — | ⊙ | — |
| 23 | 09 | " | 69 02 | 40 07 | 609 | 6 | 113 | — | -26.0 | — | ⊙ | > 7.0 |
| | 15 | 26 | 69 02 | 40 29 | 870 | 5 | 68 | — | -28.0 | — | ⊙ | > 7.0 |
| | 21 | 30 | 69 03 | 40 40 | 961 | 4 | 113 | — | -28.0 | — | ⊙ | — |
| 24 | 09 | " | 69 03 | 40 40 | 961 | 7 | 113 | — | -25.0 | — | ⊙ ↗ | 0.3 |
| | 15 | H 50 | 69 09 | 40 58 | 1114 | 10 | 90 | — | -25.0 | — | ↗ | 0.2 |
| | 21 | 55 | 69 10 | 41 00 | 1118 | 12 | 90 | — | -20.0 | — | ↗ | — |
| 25 | 09 | " | " | " | " | 20 | 90 | — | -15.8 | — | ↗ | < 0.1 |
| | 15 | " | " | " | " | 11 | 45 | — | -14.8 | — | ↗ | 0.2 |
| | 21 | " | " | " | " | 6 | 45 | — | -15.0 | — | ⊙ | — |
| 26 | 09 | " | " | " | " | 9 | 23 | — | -17.0 | — | ↗ | 0.1 |
| | 12 | " | " | " | " | | | | | | | |
| | 15 | 75 | 69 16 | 41 14 | 1190 | 6 | 68 | — | -16.0 | — | ↗ | 0.1 |
| 27 | 21 | 79 | 69 16 | 41 16 | 1198 | 6 | 68 | — | -17.0 | — | ↗ | — |
| | 00 | " | " | " | " | | | | | | | |
| | 09 | " | " | " | " | 10 | 45 | — | -24.0 | — | ↗ | < 0.1 |
| | 15 | " | " | " | " | 15 | 90 | — | -19.7 | — | ↗ | < 0.1 |
| | 21 | " | " | " | " | 23 | 90 | — | -11.0 | — | ↗ | — |
| 28 | 00 | " | " | " | " | | | | | | | |
| | 12 | | | | | 22 | 45 | — | -11.0 | — | ↗ | < 0.1 |
| | 15 | | | | | 24 | 45 | — | -11.0 | — | ↗ | < 0.1 |
| | 21 | | | | | — | 23 | — | -12.0 | — | ↗ | — |

Table 2. Surface meteorological data between Syowa Station and Mizuho Camp (May 30 - June 26, 1971).

| Date | Time (LT) | Station number | Latitude (°S) | Longitude (°E) | Altitude (m) | Wind speed (m/s) | Wind direction | Pressure (mb) | Temperature (°C) | Cloud | Weather | Visibility (km) |
|--------|--------------|-------------------|------------------|-------------------|-----------------|------------------------|-------------------|------------------|---------------------|-------|---------|--------------------|
| May 30 | 15 | Tottuki Point | 69° 17' | 39° 50' | 0 | 0 | — | — | 0 | 0 | ○ | > 70 |
| | 18 | Tottuki Point | " | " | 0 | 8 | — | 968 | -21.5 | 0 | ○ | — |
| 31 | 12 | S 17 | 69 02 | 40 04 | 583 | 8 | — | 922 | -22.0 | — | — | 45 |
| | 15 | 21 | 69 02 | 40 15 | 699 | 11 | 90° | 899 | -23.2 | 2 | ⬇ | — |
| | 18 | 27-4 | 69 03 | 40 35 | 916 | 8 | 90 | 880 | -24.6 | 3 | ① | — |
| June 1 | 09 | 30 | 69 03 | 40 40 | 961 | 10 | 135 | 867 | -33.0 | 2 | ⬇ | > 70 |
| | 12 | H 39 | 69 08 | 40 55 | 1086 | 10 | 113 | 856 | -30.0 | 9 | ⊙ | > 70 |
| | 15 | 69 | 69 12 | 41 06 | 1165 | 11 | 90 | 849 | -29.8 | 2 | ⬇ | > 70 |
| | 18 | 92 | 69 17 | 41 16 | 1249 | 12 | 90 | 835 | -31.6 | 4 | ⬇ | — |
| | 21 | 101 | 69 19 | 41 22 | 1287 | 12 | 68 | 828 | -28.8 | 10 | ⬇ | — |
| | 2 | 15 | 69 22 | 41 29 | 1322 | 9 | 360 | 810 | -17.0 | 9 | ⬇ | — |
| | 18 | 127 | 69 24 | 41 35 | 1357 | 7 | 360 | 808 | -17.2 | — | ⬇ | — |
| | 3 | 06 | 69 27 | 41 42 | 1384 | 8 | 68 | 807 | -20.3 | 4 | ⬇ | — |
| | 09 | 142 | 69 28 | 41 43 | 1390 | 8 | 68 | 807 | -23.2 | — | ⬇ | — |
| | 12 | 170 | 69 33 | 41 57 | 1482 | 5 | 45 | 800 | -24.6 | — | — | — |
| | 18 | 187 | 69 37 | 42 06 | 1532 | 2 | 45 | 792 | -31.4 | 5 | — | — |
| | 21 | 200 | 69 39 | 42 12 | 1560 | 5 | — | 789 | -32.5 | 10 | ⊙ | — |
| 4 | 07 | 200 | 69 39 | 42 12 | 1560 | 5 | 90 | 784 | -30.0 | 4 | ① | — |
| | 09 | " | " | " | " | 4 | 90 | 784 | -33.0 | — | ⊙ | — |
| | 12 | 220 | 69 43 | 42 23 | 1610 | 5 | 113 | 778 | -37.0 | 9 | ⊙ | > 70 |
| | 18 | 264 | 69 52 | 42 45 | 1740 | 5 | 135 | 764 | -37.0 | 10 | ⊙ | — |
| | 21 | 280 | 69 56 | 42 53 | 1792 | 6 | 90 | 759 | -37.5 | 10 | ⊙ | — |
| | 5 | 09 | " | " | " | 7 | 90 | 760 | -38.9 | — | — | — |
| | 12 | 297 | 69 59 | 43 02 | 1847 | 8 | 90 | 756 | -45.7 | — | ① | > 2 |
| | 15 | 300 | 70 00 | 43 03 | 1870 | 11 | 113 | 758 | -47.5 | — | ⬇ | > 2 |
| | 18 | " | " | " | " | 12 | 113 | 759 | -47.5 | — | ⬇ | — |
| 6 | 09 | " | " | " | " | 14 | 113 | 761 | -43.0 | — | ⬇ | < 0.1 |
| | 12 | " | " | " | " | 13 | 113 | 762 | -42.0 | — | ⬇ | < 0.1 |
| | 15 | " | " | " | " | 14 | 113 | 764 | -41.0 | — | ⬇ | < 0.1 |

| Date | Time (LT) | Station number | Latitude (°S) | Longitude (°E) | Altitude (m) | Wind speed (m/s) | Wind direction | Pressure (mb) | Temperature (°C) | Cloud | Weather | Visibility (km) |
|--------|--------------|-------------------|------------------|-------------------|-----------------|------------------------|-------------------|------------------|---------------------|-------|---------|--------------------|
| June 6 | 18 | H 300 | 70° 00' | 43° 03 | 1870 | 15 | 113° | 764 | -38.6 | — | ↕ | — |
| | 21 | " | " | " | " | 17 | 90 | 765 | -33.4 | — | ↕ | — |
| 7 | 06 | " | " | " | " | 17 | 90 | 769 | -29.4 | — | ↕ | — |
| | 18 | " | " | " | " | 14 | 90 | 775 | -32.0 | — | ↕ | — |
| 8 | 06 | " | " | " | " | 17 | 90 | 771 | -35.0 | — | ↕ | < 0.1 |
| | 18 | " | " | " | " | 14 | 90 | 762 | -34.5 | — | ↕ | < 0.1 |
| | 21 | " | " | " | " | 14 | 90 | 761 | -33.2 | — | ↕ | — |
| 9 | 12 | " | " | " | " | 13 | 90 | 756 | -37.4 | — | ↕ | < 0.1 |
| | 21 | " | " | " | " | 9 | 90 | 757 | -40.0 | 0 | ⊙ | — |
| 10 | 06 | " | " | " | " | 7 | 90 | 759 | -39.5 | 0 | ⊙ | — |
| | 15 | " | " | " | " | 10 | 90 | 765 | -44.7 | 0 | ↕ | < 0.1 |
| | 18 | " | " | " | " | 11 | 90 | 766 | -45.7 | 0 | ↕ | < 0.1 |
| 11 | 21 | " | " | " | " | 12 | 90 | 768 | -45.4 | 0 | ↕ | — |
| | 00 | " | " | " | " | 13 | 90 | 769 | -46.0 | 0 | ↕ | — |
| | 09 | " | " | " | " | 14 | 90 | 770 | -44.2 | 0 | ↕ | > 0.3 |
| | 15 | " | " | " | " | 13 | 90 | 770 | -46.1 | 0 | — | 0.2 |
| 12 | 18 | " | " | " | " | 12 | 90 | 770 | -47.2 | 0 | ↕ | 0.2 |
| | 09 | " | " | " | " | 10 | 90 | 773 | -45.2 | 1 | ⊙ | 1 |
| | 12 | " | " | " | " | 11 | 90 | — | -44.2 | 1 | ↕ | > 70 |
| | 15 | " | " | " | " | 11 | 90 | 774 | -43.4 | 1 | ↕ | — |
| 13 | 09 | S 122 | 70 01 | 43 07 | 1853 | 9 | 90 | 773 | -33.5 | 10 | ⊙ | > 1 |
| | 12 | " | " | " | " | 9 | 90 | 774 | -29.6 | 10 | ⊙ | < 0.3 |
| | 15 | Z 6 | 70 04 | 43 11 | 1903 | 9 | 68 | 770 | -29.6 | 10 | ↕ | < 0.3 |
| | 18 | 11 | 70 06 | 43 15 | 1916 | 9 | 68 | 769 | -29.4 | — | ↕ | — |
| 14 | 06 | " | " | " | " | 8 | 90 | 769 | -28.4 | 10 | ⊙ | — |
| | 12 | 23 | 70 12 | 43 24 | 1958 | 9 | 90 | 767 | -29.4 | 10 | ↔ ↕ | > 70 |
| | 15 | 29-1 | 70 15 | 43 29 | 1993 | 5 | 90 | 762 | -29.9 | 10 | ↔ ↕ | — |
| | 18 | 36 | 70 18 | 43 34 | 2016 | 9 | 68 | 760 | -31.3 | 10 | ↕ | > 3 |
| 15 | 21 | " | " | " | " | 10 | 68 | 758 | -35.0 | 3 | ↕ | — |
| | 06 | " | " | " | " | 10 | 68 | 753 | -39.5 | 2 | ↕ | — |
| | 09 | 39 | 70 20 | 43 37 | 2021 | 9 | 68 | 751 | -42.0 | 0 | ↕ | > 1 |

| Date | Time (LT) | Station number | Latitude (°S) | Longitude (°E) | Altitude (m) | Wind speed (m/s) | Wind direction | Pressure (mb) | Temperature (°C) | Cloud | Weather | Visibility (km) |
|---------|--------------|-------------------|------------------|-------------------|-----------------|------------------------|-------------------|------------------|---------------------|-------|---------|--------------------|
| June 15 | 12 | Z 52 | 70° 24' | 43° 43' | 2020 | 10 | 68° | 749 | -42.0 | 1 | ⬇ | > 2 |
| | 15 | 62 | 70 26 | 43 47 | 2042 | 9 | 68 | 746 | -42.0 | 2 | ⬇ | > 0.5 |
| 16 | 06 | 73 | 70 29 | 43 53 | 2068 | 7 | 68 | 740 | -44.0 | 3 | ⊙ | — |
| | 12 | 83 | 70 33 | 44 01 | 2095 | 7 | 68 | 741 | -46.5 | 2 | ⬇ | 0.6 |
| | 15 | 89 | 70 36 | 44 06 | 2107 | 8 | 68 | 740 | -46.0 | 3 | ⬇ | < 0.1 |
| | 18 | 90 | 70 36 | 44 06 | 2111 | 13 | 68 | 739 | -45.7 | 2 | ⬆ | 0.3 |
| | 21 | " | " | " | " | 14 | 68 | 739 | -46.2 | 2 | ⬆ | 0.3 |
| | 17 | 18 | " | " | " | 18 | 68 | 736 | -44.5 | 3 | ⬆ | — |
| | 21 | " | " | " | " | 15 | 68 | 736 | -44.4 | 3 | ⬆ | — |
| | 18 | 09 | " | " | " | 14 | 68 | 734 | -44.2 | 3 | ⬆ | — |
| | 15 | " | " | " | " | 15 | 68 | 734 | -44.5 | 4 | ⬆ | 0.1 |
| | 18 | " | " | " | " | 15 | 68 | 734 | -45.0 | 6 | ⬆ | — |
| | 21 | " | " | " | " | 15 | 68 | 734 | -44.5 | — | ⬆ | 0.1 |
| | 19 | 00 | " | " | " | 18 | 68 | 733 | -44.1 | — | ⬆ | 0.1 |
| | 18 | " | " | " | " | 15 | 68 | 735 | -33.4 | — | ⬆ | — |
| | 20 | 00 | " | " | " | 14 | 68 | 739 | -36.0 | — | ⬆ | — |
| | 03 | " | " | " | " | 13 | 68 | 739 | -37.8 | — | ⬆ | — |
| | 15 | " | " | " | " | 12 | 68 | 740 | -35.2 | — | ⬆ | — |
| | 18 | " | " | " | " | 12 | 90 | 741 | -35.0 | — | ⬆ | — |
| | 21 | " | " | " | " | 10 | 90 | 741 | -36.5 | — | ⬇ | — |
| | 21 | 00 | " | " | " | 12 | 90 | 741 | -36.1 | — | ⬆ | — |
| | 06 | " | " | " | " | 13 | 90 | 741 | -39.2 | — | ⬆ | — |
| | 09 | " | " | " | " | 13 | 90 | 740 | -40.9 | — | ⬆ | 0.1 |
| | 12 | " | " | " | " | 15 | 90 | 740 | -42.4 | 2 | ⬆ | 0.2 |
| | 15 | " | " | " | " | 14 | 90 | 740 | -44.4 | 1 | ⬆ | 0.2 |
| | 22 | 00 | " | " | " | 15 | 90 | 740 | -46.5 | — | ⬆ | — |
| | 02 | " | " | " | " | 16 | 90 | 740 | -47.5 | — | ⬆ | — |
| | 08 | " | " | " | " | 12 | 90 | 741 | -48.5 | — | ⬆ | — |
| | 09 | " | " | " | " | 14 | 90 | 741 | -49.0 | 1 | ⬆ | 0.5 |
| | 12 | " | " | " | " | 13 | 90 | 741 | -49.2 | 0 | ⬆ | 0.6 |
| | 16 | " | " | " | " | 14 | 90 | 742 | -50.0 | — | ⬆ | — |

| Date | Time (LT) | Station number | Latitude (°S) | Longitude (°E) | Altitude (m) | Wind speed (m/s) | Wind direction | Pressure (mb) | Temperature (°C) | Cloud | Weather | Visibility (km) |
|---------|--------------|-------------------|------------------|-------------------|-----------------|------------------------|-------------------|------------------|---------------------|-------|---------|--------------------|
| June 22 | 18 | Z 90 | 70° 36' | 44° 06' | 2111 | 13 | 90° | 742 | -50.0 | — | ☀ | — |
| 23 | 00 | " | " | " | " | 13 | 90 | 741 | -50.6 | — | ☀ | — |
| | 02 | " | " | " | " | 14 | 90 | 741 | -51.0 | — | ☀ | — |
| | 06 | " | " | " | " | 15 | 90 | — | -50.5 | — | ☀ | — |
| | 12 | " | " | " | " | 14 | 90 | 740 | -51.2 | — | ☀ | 0.2 |
| | 15 | " | " | " | " | 14 | 90 | 740 | -52.5 | — | ☀ | — |
| | 21 | " | " | " | " | 14 | 90 | 738 | -53.0 | — | ☀ | — |
| 24 | 00 | " | " | " | " | 14 | 90 | 737 | -52.0 | — | ☀ | — |
| | 03 | " | " | " | " | 15 | 90 | 737 | -52.0 | — | ☀ | — |
| | 12 | " | " | " | " | 12 | 90 | 736 | -50.0 | 1 | ☁ | 1 |
| | 15 | " | " | " | " | 10 | 90 | 739 | -52.0 | 1 | ☁ | — |
| | 18 | " | " | " | " | 10 | 90 | 740 | -51.0 | — | ☁ | — |
| | 21 | " | " | " | " | 10 | 90 | 742 | -51.2 | — | ☁ | — |
| 25 | 00 | " | " | " | " | 11 | 90 | 742 | -51.7 | — | ☁ | — |
| | 03 | " | " | " | " | 11 | 90 | 745 | -50.2 | — | ☁ | — |
| | 12 | " | " | " | " | 12 | 90 | 747 | -47.8 | 1 | ☀ | 0.3 |
| | 15 | " | " | " | " | 12 | 90 | 747 | -49.2 | — | ☀ | — |
| | 20 | " | " | " | " | 13 | 90 | 747 | -48.7 | — | ☀ | — |
| | 21 | " | " | " | " | 14 | 90 | 746 | -47.3 | — | ☀ | — |
| 26 | 00 | " | " | " | " | 15 | 90 | 745 | -46.7 | — | ☀ | — |
| | 03 | " | " | " | " | 16 | 90 | 743 | -46.0 | — | ☀ | — |
| | 09 | " | " | " | " | 17 | 90 | 739 | -43.5 | — | ☀ | — |
| | 14 | " | " | " | " | 19 | 90 | 738 | -43.6 | — | ☀ | — |
| | 15 | " | " | " | " | 19 | 90 | 737 | -43.5 | — | ☀ | — |
| | 18 | " | " | " | " | 19 | 90 | 735 | -43.1 | — | ☀ | — |
| 27 | 00 | " | " | " | " | 18 | 90 | 734 | -38.2 | — | ☀ | — |
| | 03 | " | " | " | " | 18 | 90 | 735 | -34.4 | — | ☀ | — |
| | 14 | " | " | " | " | 16 | 90 | 740 | -28.9 | — | ☀ | 0.2 |
| | 15 | " | " | " | " | 17 | 90 | 740 | -28.4 | — | ☀ | — |
| | 21 | " | " | " | " | 15 | 90 | 745 | -29.3 | — | ☀ | — |
| 28 | 00 | " | " | " | " | 13 | 90 | 747 | -29.2 | — | ☀ | — |

| Date | Time (LT) | Station number | Latitude (°S) | Longitude (°E) | Altitude (m) | Wind speed (m/s) | Wind direction | Pressure (mb) | Temperature (°C) | Cloud | Weather | Visibility (km) |
|---------|--------------|-------------------|------------------|-------------------|-----------------|------------------------|-------------------|------------------|---------------------|-------|---------|--------------------|
| June 28 | 06 | Z 90 | 70° 36' | 44° 06' | 2111 | 13 | 90° | 749 | -30.7 | — | ☀ | — |
| | 09 | " | " | " | " | 14 | 90 | 751 | -31.5 | — | ☀ | 1 |
| | 15 | 103 | 70 42 | 44 16 | 2156 | 13 | 90 | 749 | -35.0 | — | ☀ | 1 |
| | 18 | Mizuho Camp | 70 42 | 44 17 | 2169 | 15 | 90 | 746 | -36.5 | — | ☀ | — |
| | 21 | " | " | " | " | 15 | 90 | 745 | -37.9 | — | ☀ | — |
| | 29 00 | " | " | " | " | 14 | 90 | 742 | -37.5 | — | ☀ | — |
| | 09 | " | " | " | " | 14 | 90 | 740 | -36.0 | — | ☀ | — |
| | 15 | " | " | " | " | 15 | 90 | 740 | -38.5 | — | ☀ | 0.8 |
| | 21 | " | " | " | " | 14 | 90 | 739 | -39.5 | — | ☀ | — |
| | 30 00 | " | " | " | " | 14 | 90 | 740 | -41.7 | — | ☀ | — |
| | 09 | " | " | " | " | 15 | 90 | 738 | -42.6 | — | ☀ | — |
| | 15 | " | " | " | " | 16 | 90 | 736 | -44.5 | — | ☀ | — |
| July 1 | 21 | " | " | " | " | 20 | 90 | 734 | -45.0 | — | ☀ | — |
| | 00 | " | " | " | " | 17 | 90 | 735 | -45.5 | — | ☀ | — |
| | 02 | " | " | " | " | 15 | 90 | — | -42.0 | — | ☀ | — |
| | 15 | " | " | " | " | 15 | 90 | 735 | -41.5 | — | ☀ | — |
| | 18 | " | " | " | " | 17 | 90 | 735 | -40.7 | — | ☀ | — |
| | 21 | " | " | " | " | 17 | 90 | 735 | -40.7 | — | ☀ | — |
| | 2 00 | " | " | " | " | 17 | 90 | 735 | -40.0 | — | ☀ | — |
| | 03 | " | " | " | " | 16 | 90 | 735 | -40.0 | — | ☀ | — |
| | 11 | " | " | " | " | 12 | 90 | 738 | -39.5 | — | ☀ | — |
| | 15 | " | " | " | " | 11 | 90 | 742 | -40.2 | — | ☀ | — |
| | 18 | " | " | " | " | 13 | 90 | 744 | -41.0 | — | ☀ | — |
| | 21 | " | " | " | " | 12 | 90 | 746 | -41.2 | — | ☀ | — |
| | 3 00 | " | " | " | " | 13 | 90 | 747 | -39.8 | — | ☀ | — |
| | 09 | " | " | " | " | 13 | 68 | 750 | -29.1 | — | ☀ | — |
| | 15 | " | " | " | " | — | 68 | 754 | -26.7 | — | ☀ | — |
| | 23 | " | " | " | " | 11 | 68 | 756 | -33.6 | — | ☀ | — |
| | 4 00 | " | " | " | " | 11 | 68 | 757 | -34.5 | — | ☀ | — |
| | 09 | " | " | " | " | 10 | 68 | 757 | -40.0 | — | ☀ | — |
| | 12 | " | " | " | " | 10 | 68 | 756 | -40.1 | 2 | ☀ | 1 |

| Date | Time (LT) | Station number | Latitude (°S) | Longitude (°E) | Altitude (m) | Wind speed (m/s) | Wind direction | Pressure (mb) | Temperature (°C) | Cloud | Weather | Visibility (km) |
|--------|--------------|-------------------|------------------|-------------------|-----------------|------------------------|-------------------|------------------|---------------------|-------|---------|--------------------|
| July 4 | 18 | Mizuho Camp | 70° 42' | 44° 17' | 2169 | 13 | 113° | — | -39.5 | — | ↑ | — |
| | 21 | " | " | " | " | 12 | 113 | 753 | -39.5 | — | ↑ | — |
| 5 | 00 | " | " | " | " | 14 | 113 | 751 | -39.1 | — | ↑ | — |
| | 02 | " | " | " | " | 15 | — | 750 | -38.7 | — | — | — |
| | 09 | " | " | " | " | 12 | 113 | 745 | -37.5 | — | ↑ | — |
| | 15 | " | " | " | " | 16 | 90 | 742 | -38.9 | — | ↑ | — |
| | 18 | " | " | " | " | 19 | 113 | 739 | -39.5 | — | ↑ | 0.1 |
| | 21 | " | " | " | " | 20 | 90 | 737 | -39.7 | — | ↑ | — |
| 6 | 02 | " | " | " | " | 17 | 90 | 738 | -40.2 | — | ↑ | — |
| | 12 | " | " | " | " | 16 | 90 | 739 | -39.4 | — | ↑ | 0.1 |
| | 15 | " | " | " | " | 12 | 90 | 741 | -40.6 | — | ↑ | 0.1 |
| | 18 | " | " | " | " | 13 | 90 | 741 | -42.0 | — | ↑ | — |
| 7 | 00 | " | " | " | " | 15 | 90 | 740 | -40.5 | — | ↑ | — |
| | 03 | " | " | " | " | 16 | 90 | 739 | -39.5 | — | ↑ | — |
| | 09 | " | " | " | " | 14 | 90 | 736 | -35.0 | — | ↑ | — |
| | 12 | " | " | " | " | 15 | 90 | 736 | -35.0 | — | ↑ | 0.3 |
| 8 | 21 | " | " | " | " | 14 | 90 | 734 | -38.2 | — | ↑ | — |
| | 11 | " | " | " | " | 12 | 90 | 734 | -40.7 | — | ↑ | — |
| | 12 | " | " | " | " | 13 | 90 | 735 | -41.0 | 0 | ↑ | 1.0 |
| | 15 | " | " | " | " | 11 | 90 | 735 | -38.5 | — | ↑ | — |
| | 18 | " | " | " | " | 12 | 90 | 736 | -37.5 | — | ↑ | — |
| | 21 | " | " | " | " | 11 | 90 | 737 | -40.5 | — | ↑ | — |
| 9 | 03 | " | " | " | " | 12 | 90 | 738 | -40.5 | — | ↑ | — |
| | 15 | " | " | " | " | 13 | 90 | 736 | -43.5 | — | ↑ | — |
| | 22 | " | " | " | " | 12 | 90 | 736 | -45.6 | — | ↑ | — |
| | 00 | " | " | " | " | 13 | 90 | 736 | -45.8 | — | ↑ | — |
| 10 | 09 | " | " | " | " | 13 | 90 | 734 | -48.6 | — | ↑ | — |
| | 12 | " | " | " | " | 12 | 90 | 735 | -48.7 | 0 | ↑ | 0.7 |
| | 16 | " | " | " | " | 13 | 90 | 735 | -49.0 | — | ↑ | — |
| | 20 | " | " | " | " | 12 | 90 | 733 | -49.5 | — | ↓ | — |
| | 21 | " | " | " | " | 12 | 90 | 733 | -49.5 | — | ↓ | — |

| Date | Time (LT) | Station number | Latitude (°S) | Longitude (°E) | Altitude (m) | Wind speed (m/s) | Wind direction | Pressure (mb) | Temperature (°C) | Cloud | Weather | Visibility (km) |
|---------|--------------|-------------------|------------------|-------------------|-----------------|------------------------|-------------------|------------------|---------------------|-------|---------|--------------------|
| July 11 | 09 | Mizuho Camp | 70° 42' | 44° 17' | 2169 | 14 | 90° | 730 | -48.3 | — | ↑ | — |
| | 12 | " | " | " | " | 14 | 90 | 730 | -44.1 | — | ↑ | — |
| 12 | 21 | " | " | " | " | 12 | 113 | 729 | -35.2 | — | ↑ | — |
| | 06 | " | " | " | " | 10 | 113 | 732 | -31.6 | — | ↓ | — |
| | 10 | " | " | " | " | 5 | 90 | 736 | -34.7 | 10 | ☉ | > 70 |
| | 12 | " | " | " | " | 8 | 90 | 737 | -35.6 | 10 | ☉ | — |
| | 08 | " | " | " | " | 12 | 90 | 730 | -38.9 | — | ↑ | — |
| 13 | 12 | " | " | " | " | 12 | 90 | 731 | -40.5 | — | ↑ | 0.2 |
| | 15 | Z 98 | 70 40 | 44 13 | 2138 | 11 | 90 | 734 | -41.2 | — | ↑ | — |
| 14 | 00 | 85 | 70 34 | 44 03 | 2094 | 12 | 90 | 739 | -41.7 | — | ↑ | — |
| | 07 | " | " | " | " | 12 | 90 | 740 | -42.0 | — | — | — |
| | 09 | Z 84-1 | 70 34 | 44 02 | 2094 | 11 | 90 | 740 | -42.7 | — | ↑ | — |
| | 12 | 75 | 70 30 | 43 54 | 2074 | 11 | 90 | 742 | -43.8 | 0 | ↑ | 0.3 |
| | 15 | 70 | 70 28 | 43 50 | 2059 | 10 | 90 | 744 | -44.2 | 0 | ↑ | 0.2 |
| 15 | 18 | 49 | 70 23 | 43 42 | 2022 | 12 | 90 | 748 | -44.2 | — | ↑ | — |
| | 00 | 40 | 70 20 | 43 37 | 2020 | 12 | 90 | 748 | -44.2 | — | ↑ | — |
| | 09 | " | " | " | " | 11 | 90 | 747 | -46.0 | 0 | ↑ | 0.3 |
| | 12 | " | " | " | " | — | — | — | -46.5 | — | — | — |
| | 15 | " | " | " | " | 11 | 90 | 747 | -47.5 | — | ↑ | — |
| 16 | 21 | " | " | " | " | 9 | 90 | 747 | -48.0 | — | ↓ | — |
| | 00 | " | " | " | " | 10 | 90 | 749 | -48.0 | — | ↓ | — |
| | 06 | " | " | " | " | 8 | 90 | 748 | -49.0 | — | ↓ | — |
| | 09 | " | " | " | " | 8 | 90 | 749 | -49.0 | 0 | ↓ | — |
| | 12 | " | " | " | " | 8 | 90 | 749 | -49.5 | 0 | ↓ | 1 |
| 17 | 15 | " | " | " | " | 8 | 90 | 749 | -49.7 | — | ↓ | — |
| | 18 | " | " | " | " | 6 | — | 747 | -49.4 | — | — | — |
| | 21 | " | " | " | " | 7 | — | 745 | — | — | — | — |
| | 00 | " | " | " | " | 9 | 90 | 745 | -51.0 | — | ↓ | — |
| | 09 | " | " | " | " | 10 | 90 | 744 | -53.0 | — | — | — |
| | 12 | " | " | " | " | 12 | 90 | 745 | -53.0 | 0 | ↓ | — |
| | 18 | " | " | " | " | 12 | 90 | 747 | -52.0 | — | ↑ | — |

| Date | Time (LT) | Station number | Latitude (°S) | Longitude (°E) | Altitude (m) | Wind speed (m/s) | Wind direction | Pressure (mb) | Temperature (°C) | Cloud | Weather | Visibility (km) |
|---------|--------------|-------------------|------------------|-------------------|-----------------|------------------------|-------------------|------------------|---------------------|-------|---------|--------------------|
| July 17 | 21 | Z 40 | 70° 20' | 43° 37' | 2020 | 11 | — | 747 | -52.0 | — | ↓ | — |
| 18 | 00 | " | " | " | " | 10 | — | 748 | -52.0 | — | ↓ | — |
| | 06 | " | " | " | " | — | — | — | -49.0 | — | — | — |
| | 09 | " | " | " | " | 10 | — | — | -46.0 | — | ↓ | — |
| | 12 | " | " | " | " | 7 | 90° | 752 | -37.5 | 10 | ↔ | — |
| | 15 | 34 | 70 17 | 43 32 | 2010 | 8 | 90 | 755 | -32.4 | 7 | ↓ | — |
| | 18 | 22 | 70 12 | 43 23 | 1952 | 12 | 90 | 760 | -29.8 | — | ↑ | — |
| | 21 | 13 | 70 07 | 43 17 | 1919 | 12 | 90 | 764 | -30.5 | — | ↑ | — |
| 19 | 00 | 3 | 70 03 | 43 09 | 1876 | 10 | 90 | 767 | -29.5 | — | ↑ | — |
| | 15 | S 122 | 70 01 | 43 07 | 1853 | 11 | 113 | 768 | -30.7 | — | ↓ | 0.8 |
| | 18 | H 282 | 69 56 | 42 54 | 1806 | 11 | 90 | 771 | -33.8 | — | ↑ | 0.7 |
| | 21 | 276 | 69 55 | 42 51 | 1783 | 12 | 90 | 778 | -33.3 | — | ↑ | 0.2 |
| 20 | 00 | 266 | 69 53 | 42 46 | 1748 | 11 | 90 | 783 | -33.6 | — | ↑ | — |
| | 09 | 260 | 69 52 | 42 43 | 1735 | 13 | 90 | 784 | -35.0 | — | ↑ | 0.1 |
| | 12 | 247 | 69 49 | 42 36 | 1697 | 8 | 90 | 789 | -36.2 | — | ↓ | 0.1 |
| | 15 | 225 | 69 44 | 42 25 | 1628 | 8 | 90 | 796 | -35.8 | — | ↓ | 0.3 |
| | 18 | 200 | 69 39 | 42 12 | 1560 | 9 | 90 | 805 | -35.2 | — | ↓ | — |
| | 21 | 180 | 69 35 | 42 02 | 1519 | 10 | 90 | 809 | -35.8 | — | ↑ | — |
| 21 | 09 | " | " | " | " | 12 | 90 | 808 | -35.2 | — | ↑ | — |
| | 12 | 159 | 69 29 | 41 46 | 1421 | 11 | 90 | 815 | -35.9 | 1 | ↑ | 0.5 |
| | 15 | 138 | 69 26 | 41 41 | 1375 | 13 | 90 | 823 | -36.4 | 0 | ↑ | 0.2 |
| | 18 | 114 | 69 22 | 41 29 | 1323 | 11 | 90 | 831 | -35.8 | — | ↑ | — |
| | 23 | 100 | 69 19 | 41 22 | 1285 | 14 | 90 | — | -36.3 | — | ↑ | — |
| 22 | 09 | 98 | 69 18 | 41 21 | 1260 | 12 | 90 | 837 | -35.0 | — | ↑ | — |
| | 12 | 79 | 69 16 | 41 16 | 1200 | 12 | 90 | 845 | -34.7 | 1 | ↑ | 0.7 |
| | 15 | 68 | 69 14 | 41 10 | 1162 | 13 | 90 | 851 | -34.8 | 1 | ↑ | 0.2 |
| | 18 | 48 | 69 09 | 40 58 | 1111 | 10 | 113 | 858 | -34.0 | — | ↑ | — |
| 23 | 00 | 35 | 69 07 | 40 54 | 1070 | 12 | 113 | 863 | -33.6 | — | ↑ | — |
| | 09 | " | " | " | " | 10 | 113 | 866 | -34.5 | 0 | ↑ | — |
| | 12 | S 30 | 69 03 | 40 40 | 981 | 10 | 113 | 880 | -33.9 | — | ↓ | — |
| | 15 | 26-2 | 69 02 | 40 29 | 870 | 12 | 90 | 891 | -33.1 | 0 | ↑ | — |

| Date | Time (LT) | Station number | Latitude (°S) | Longitude (°E) | Altitude (m) | Wind speed (m/s) | Wind direction | Pressure (mb) | Temperature (°C) | Cloud | Weather | Visibility (km) |
|---------|--------------|-------------------|------------------|-------------------|-----------------|------------------------|-------------------|------------------|---------------------|-------|---------|--------------------|
| July 23 | 23 | S 16 | 69° 02' | 40° 03' | 553 | 15 | — | 834 | -28.7 | — | — | — |
| 24 | 15 | " | " | " | " | 22 | 90° | 917 | -23.4 | — | ↑ | — |
| | 21 | " | " | " | " | 20 | 68 | 910 | -23.7 | — | ↑ | — |
| 25 | 00 | " | " | " | " | 22 | 68 | 907 | -19.2 | — | ↑ | — |
| | 21 | " | " | " | " | 23 | 68 | 915 | -17.0 | — | ↑ | — |
| 26 | 08 | " | " | " | " | 18 | — | 922 | -20.4 | — | ↑ | — |
| | 09 | " | " | " | " | 17 | 90 | 922 | -20.7 | 1 | ↑ | — |
| | 12 | " | " | " | " | 16 | 90 | 923 | -21.2 | 1 | ↑ | — |
| | 15 | " | " | " | " | 16 | 90 | 961 | -18.8 | 1 | ↓ | — |
| | 18 | Tottuki Point | 69 17 | 39 50 | 0 | 19 | 90 | 982 | -17.0 | 2 | ↓ | — |

Table 3. Surface meteorological data from Syowa Station to Mizuho Camp (September 23-27, 1971).

| Date | Time (LT) | Station number | Latitude (°S) | Longitude (°E) | Altitude (m) | Wind speed (m/s) | Wind direction | Pressure (mb) | Temperature (°C) | Cloud | Weather | Visibility (km) |
|---------|--------------|-------------------|------------------|-------------------|-----------------|------------------------|-------------------|------------------|---------------------|-------|---------|--------------------|
| Sep. 23 | 06 | S 25 | 69° 02' | 40° 27' | 844 | 8 | 90° | 895 | -37.7 | 0 | ○ ↓ | > 70 |
| | 09 | H 0 | 69 03 | 40 40 | 961 | 10 | 113 | — | -34.5 | 0 | ○ ↓ | > 70 |
| | 12 | 17 | 69 05 | 40 48 | 1014 | 13 | 113 | 879 | -29.4 | 0 | ○ ↑ | < 0.1 |
| | 15 | 56 | 69 10 | 41 00 | 1120 | 15 | 113 | 869 | -28.6 | 0 | ○ ↑ | < 0.1 |
| | 21 | 63 | 69 11 | 41 03 | 1138 | 13 | 90 | 869 | -27.3 | | ⊙ ↑ | |
| 24 | 09 | 75 | 69 14 | 41 09 | 1187 | 10 | 90 | 869 | -23.9 | 10 | ⊙ ↓ | 0.9 |
| | 12 | 100 | 69 19 | 41 22 | 1285 | 8 | 90 | 861 | -23.0 | 10 | ⊙ ↓ | 0.7 |
| | 15 | 132 | 69 25 | 41 38 | 1365 | 8 | 90 | 853 | -23.4 | 10 | ⊙ ↓ | > 70 |
| | 18 | 174 | 69 34 | 41 59 | 1503 | 8 | 90 | 839 | -27.5 | 5 | ⊙ | > 70 |
| | 21 | 180 | 69 35 | 42 02 | 1519 | 9 | 68 | 839 | -28.2 | 4 | ⊙ | |
| 25 | 09 | " | " | " | " | 8 | 68 | 840 | -26.1 | 0 | ○ | > 70 |
| | 12 | 212 | 69 42 | 42 19 | 1595 | 14 | 135 | 833 | -23.0 | 0 | ○ | > 70 |
| | 15 | 235 | 69 46 | 42 30 | 1658 | 18 | 68 | 826 | -23.5 | 0 | ○ | > 70 |
| | 18 | 273 | 69 43 | 42 24 | 1769 | 19 | 90 | 815 | -27.5 | 0 | ○ ↓ | 0.1 |
| | 21 | 280 | 69 56 | 42 53 | 1792 | 15 | 68 | 810 | -28.5 | 2 | ⊙ | |

| Date | Time (LT) | Station number | Latitude (°S) | Longitude (°E) | Altitude (m) | Wind speed (m/s) | Wind direction | Pressure (mb) | Temper- ature (°C) | Cloud | Weather | Visibility (km) |
|---------|--------------|-------------------|------------------|-------------------|-----------------|------------------------|-------------------|------------------|--------------------------|-------|---------|--------------------|
| Sep. 26 | 06 | 280 | 69° 56' | 42° 53' | 1792 | 19 | 68° | 805 | -27.2 | 1 | ☉ ↗ | 0.8 |
| | 09 | S 122 | 70 01 | 43 07 | 1853 | 17 | 90 | 793 | -26.4 | 0 | ☉ ↗ | 0.5 |
| | 12 | Z 11 | 70 06 | 43 15 | 1916 | 18 | 90 | 786 | -24.6 | 1 | ↗ | 0.3 |
| | 15 | 25 | 70 13 | 43 26 | 1971 | 15 | 90 | 782 | -24.8 | 0 | ↗ | > 70 |
| | 18 | 39 | 70 20 | 43 37 | 2021 | 13 | 90 | 775 | -29.3 | 0 | ☉ | > 70 |
| | 21 | Z 40 | 70 20 | 43 37 | 2020 | 13 | 90 | 773 | -31.5 | 0 | ☉ | |
| 27 | 06 | " | " | " | " | 16 | 90 | 771 | -31.3 | 0 | ↗ | 0.6 |
| | 09 | " | " | " | " | 15 | 90 | 774 | -30.0 | 0 | ↗ | 0.7 |
| | 12 | 71 | 70 28 | 43 51 | 2061 | 16 | 90 | 770 | -28.0 | 0 | ↗ | 0.2 |
| | 15 | 84 | 70 34 | 44 02 | 2094 | 12 | 90 | 767 | -27.0 | 0 | ↗ | 1.0 |
| | 18 | 99 | 70 40 | 44 13 | 2137 | 12 | 90 | 762 | -30.7 | 1 | ↗ | 0.3 |

Table 4. Surface meteorological data between Syowa Station and Mizuho Camp (January 14-23, 1972).

[illegible]

Table 5. Surface meteorological data between Syowa Station and Mizuho Camp
(April 17 - May 15, 1972).

| Date | Time (LT) | Station number | Latitude (°S) | Longitude (°E) | Altitude (m) | Wind speed (m/s) | Wind direction | Pressure (mb) | Temper- ature (°C) | Cloud | Weather | Visibility (km) |
|---------|--------------|-------------------|------------------|-------------------|-----------------|------------------------|-------------------|------------------|--------------------------|-------|---------|--------------------|
| Apr. 17 | 0900 | S 16 | 69° 02' | 40° 03' | 553 | 9.5 | 135° | — | -16.0 | — | — | — |
| 19 | 0900 | S 16 | " | " | " | 18.0 | 158 | — | -12.5 | 3 | ↕ | 0.2 |
| 20 | 0900 | S 26 | 69 02 | 40 29 | 870 | 19.0 | 135 | 881 | -11.5 | 7 | ↕ | 0.2 |
| | 1500 | H 26 | 69 06 | 40 51 | 1047 | 15.0 | 158 | 866 | -18.3 | 6 | ↕ | 1 |
| 21 | 0900 | H 37 | 69 08 | 40 54 | 1078 | 10.0 | 180 | 860 | -25.0 | 0 | ↕ | 10 |
| | 1500 | H 107 | 69 20 | 41 25 | 1307 | 10.0 | 180 | 835 | -25.0 | 0 | ↕ | 10 |
| 22 | 0900 | H 128 | 69 25 | 41 36 | 1359 | 9.0 | 180 | 826 | -27.0 | 0 | ↕ | 10 |
| | 1500 | H 195 | 69 38 | 42 10 | 1539 | 10.0 | 158 | 807 | -28.5 | 3 | ↕ | 10 |
| 23 | 0900 | H 219 | 69 43 | 42 22 | 1609 | 9.0 | 180 | 801 | -29.2 | 3 | ↕ | 10 |
| | 1500 | H 262 | 69 52 | 42 44 | 1738 | 10.5 | 135 | 790 | -29.5 | 3 | ↕ | 1 |
| 24 | 0900 | H 282 | 69 56 | 42 54 | 1803 | — | — | 785 | -32.0 | 0 | ↕ | 0.5 |
| | 1500 | S 122 | 70 01 | 43 07 | 1853 | 10.5 | 158 | 778 | -32.0 | 0 | ↕ | 1 |
| 25 | 0900 | Z 2 | 70 02 | 43 08 | 1866 | 10.5 | 158 | 779 | -30.5 | 8 | ↕ | 0.5 |
| | 1500 | Z 35 | 70 18 | 43 34 | 2012 | 11.5 | 135 | 762 | -29.8 | 8 | ↕ | 1 |
| 26 | 0900 | Z 47 | 70 22 | 43 41 | 2025 | 8.5 | 135 | 768 | -36.5 | 0 | ↕ | 1 |
| | 1500 | Z 88 | 70 35 | 44 05 | 2103 | 11.0 | 135 | 765 | -35.5 | 4 | ↕ | 0.5 |
| 27 | 0900 | Z 90 | 70 36 | 44 06 | 2111 | 10.0 | 135 | 765 | -31.5 | 9 | ↕ | 0.5 |
| May. 7 | 1500 | Z 83 | 70 33 | 44 01 | 2095 | 6.0 | 135 | 751 | -25.5 | 10 | ☉ | 1 |
| 8 | 0900 | Z 73 | 70 29 | 43 53 | 2078 | 10.0 | 135 | 750 | -34.5 | 0 | ↕ | 0.3 |
| | 1500 | Z 23 | 70 12 | 43 24 | 1958 | 10.0 | 135 | 765 | -33.5 | 1 | ↕ | 1 |
| 9 | 0900 | Z 16 | 70 09 | 43 19 | 1927 | 13.0 | 135 | 768 | -35.5 | 0 | ↕ | 0.3 |
| 10 | 0900 | Z 16 | " | " | " | 6.0 | 135 | — | -40.0 | 0 | ↕ | 1 |
| 11 | 0900 | Z 16 | " | " | " | 13.0 | 135 | — | -41.0 | 0 | ↕ | — |
| 12 | 0900 | Z 16 | " | " | " | — | — | — | -41.0 | 0 | ↕ | — |
| 13 | 0900 | Z 16 | " | " | " | — | — | — | -40.0 | 0 | ↕ | — |
| 14 | 0900 | H 280 | 69 56 | 42 53 | 1797 | — | — | — | -42.0 | 0 | ○ | — |
| 15 | 0900 | H 100 | 69 19 | 41 22 | 1280 | — | — | — | -29.0 | 0 | ↕ | — |

Table 6. Surface meteorological data between Syowa Station and Mizuho Camp
(August 24 – September 11, 1972).

| Date | Time (LT) | Station number | Latitude (°S) | Longitude (°E) | Altitude (m) | Wind speed (m/s) | Wind direction | Temper- ature (°C) | Cloud | Weather | Visibility (km) |
|---------|--------------|-------------------|------------------|-------------------|-----------------|------------------------|-------------------|--------------------------|-------------|---------|--------------------|
| Aug. 24 | 1500 | S 20 | 69° 02' | 40° 12' | 653 | 9.5 | 90° | -16.5 | 7Ac | ↗ | 0.2 |
| 25 | 0900 | H 30 | 69 07 | 40 52 | 1050 | 3.0 | 90 | -30.5 | 2Ac, Ci | ○ | 50 |
| | 1500 | H 120 | 69 23 | 41 32 | 1340 | 3.0 | 90 | -27.5 | 9Ci, Cs | ☉ | 50 |
| 26 | 0900 | H 173 | 69 34 | 41 59 | 1502 | 3.0 | 90 | -34.8 | 8Ac | ☉ | 50 |
| | 1500 | H 255 | 69 51 | 42 10 | 1720 | 2.0 | 113 | -33.7 | 8St, Ac, Cs | ✱ | 30 |
| 27 | 1020 | S 122 | 70 01 | 43 06 | 1853 | 6.0 | 113 | -42.0 | — | ↗ | 2 |
| 28 | 0900 | Z 35 | 70 17 | 43 33 | 2012 | 9.0 | 113 | -43.5 | 10Ci, Cs | ↗ | 0.2 |
| | 1500 | Z 80 | 70 32 | 43 58 | 2091 | 10.0 | 113 | -42.9 | 3Ac, Ci | ↗ | 0.3 |
| 29 | 1100 | Mizuho | 70 41 | 44 18 | 2169 | 9.0 | 113 | -44.0 | — | ↗ | 0.2 |
| Sep. 5 | 1500 | Z 70 | 70 28 | 43 50 | 2059 | 11.5 | 113 | -34.5 | 6Ci, Cs | ↗ | 0.3 |
| 6 | 0900 | Z 35 | 70 17 | 43 33 | 2012 | 11.5 | 113 | -36.0 | 9As, Ac | ↗ | 0.3 |
| | 1500 | Z 16 | 70 09 | 43 19 | 1927 | 8.0 | 90 | -35.2 | 8Ci, Cs | ☉ | 5 |
| 7 | 1415 | Z 16 | " | " | " | 8.5 | 90 | -31.5 | 8As, Ci, Cs | ☉ | 1 |
| 8 | 0900 | S 122 | 70 01 | 43 06 | 1853 | 9.0 | 90 | -24.5 | 10Cs | ↗ | 50 |
| 9 | 0900 | H 285 | 69 57 | 42 56 | 1816 | 12.0 | 90 | -26.5 | 10As | ↗ | 0.1 |
| | 1500 | H 213 | 69 42 | 42 19 | 1600 | 2.5 | 90 | -26.0 | 10As | ✱ | 3 |
| 10 | 0900 | H 140 | 69 27 | 41 42 | 1385 | 10.5 | 90 | -28.8 | 10Ci, Cs | ↗ | 0.2 |
| | 1800 | S 16 | 69 02 | 40 03 | 553 | 13.0 | 68 | -23.5 | — | ↗ | 0.03 |
| 11 | 0900 | S 16 | " | " | " | 19.0 | 68 | -18.5 | — | ✱ ↗ | 0.01 |

Table 7. Surface meteorological data between Syowa Station and Mizuho Camp
(October 23 – November 7, 1972).

| Date | Time (LT) | Station number | Latitude (°S) | Longitude (°E) | Altitude (m) | Wind speed (m/s) | Wind direction | Temper- ature (°C) | Cloud | Weather | Visibility (km) |
|---------|--------------|-------------------|------------------|-------------------|-----------------|------------------------|-------------------|--------------------------|-------|---------|--------------------|
| Oct. 23 | 0900 | Tottuki Point | 69° 17' | 39° 50' | 0 | 12.0 | — | -12.5 | 10 | ☉ ↗ | 0.2 |
| 24 | 0900 | S 17 | 69 02 | 40 04 | 583 | 11.0 | — | - 7.5 | 10 | * | 0.2 |
| 25 | 0900 | S 25 | 69 02 | 40 27 | 844 | 12.0 | — | - 8.0 | 10 | ☉ | 0.3/2 |
| 26 | 0900 | H 150 | 69 29 | 41 47 | 1427 | 4.0 | — | -14.5 | 10 | ☉ | 0.3 |
| 27 | 0900 | Z 10 | 70 06 | 43 14 | 1911 | 9.0 | — | -21.0 | 0 | ○ ↗ | 2 |
| 28 | 0900 | Z 85 | 70 34 | 44 03 | 2094 | 11.0 | — | -29.0 | 0 | ○ ↗ | 0.1 |
| Nov. 4 | 0900 | Z 80 | 70 32 | 43 58 | 2091 | 8.0 | — | -20.0 | 2 | ① ↗ | 1 |
| 5 | 0900 | S 122 | 70 01 | 43 07 | 1853 | 11.0 | — | -16.0 | 5 | ① | 2 |
| 6 | 0900 | H 175 | 69 34 | 42 00 | 1506 | 15.0 | — | -19.0 | 10 | ↗ | 0.05 |
| 7 | 0900 | H 70 | 69 12 | 41 06 | 1165 | 12.0 | — | -13.0 | 5 | ① | 2 |